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Indian Standard

# SHAPE, SIZE AND DIRECTION OF OPERATION OF LEVER CONTROLS ON AIRCRAFT

1. Scope — Recommended shapes, sizes and directions of operation for lever controls on aircraft.

#### 2. General

- 2.1 The direction of operation of aircraft lever controls shall be in accordance with the principle that forward or upward movement of controls tends to increase the performance of the component or aircraft.
- 2.2 For aircraft controls other than those covered in 3, the control knobs of handles of the lever shall be of a shape different from those shown.
- 2.3 Where braking propellers are fitted, operation shall be by pulling the throttle back beyond normal 'Throttle Closed' position to give progressively greater reverse thrust.
- 2.4 Operation of a trimming device by levers shall result in movement of the aircraft in the same direction. Operation by rotary control shall be in accordance with 4.
- 2.5 Only emergency controls shall be coloured red.
- 3. Shape, Size and Direction of Operation of Lever Controls

SI No.	Type of Control	Shape and Approximate Size	Operation of Control	
			Movement	Result of Movement
1.	Throttle control	35 ¢	Forward	Increased forward thrust
2.	Mixture control	300	Forward or upward	Rich mixture

(Continued)

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SI	Type of Control	Shape and Approximate Size	Operation of Control	
No.	Control	mm	Movement	Result of Movement
3.	Engine supercharger control	25 28 2R	Forward or upward	Engage high gear
4.	Air intake control	68 15 R	a) Forward or upward b) Centre c) Aft down	a) Ram (normal) b) Filter c) Hot
5.	RPM control	35	Forward	High revolutions per minute
6.	Ignition	Timber switch or rotary switch	Upward or clockwise	Ignition on
7.	Fuel shut-off	SECTION XX	Forward or upward	Valve open

### AMENDMENT NO. 1 FEBRUARY 1974

TO

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#### Corrigendum

(Page 2, Serial No. 6, under 'Shape and Approximate Size') — Substitute 'Tumbler Switch', for 'Timber Switch'.

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SI	Type of Control	Shape and Approximate Size	Operation of Control	
No.	Control	mm	Movement	Result of Movement
8.	Emergency shut-off	80	Pull	Shut-off ( closed )
9.	Fire extinguisher control			Fire extinguisher in operation
10.	Air brake (any device primarily used to increase the drag of an aircraft at will)	SECTION XX	Forward or upward	Flap retracted
11.	Landing flaps control	35	Forward or upward	Flap retracted
12.	Parachute	35-14-20	Backward	Parachute streamed
12.	brake		Forward	Parachute jettisoned
13.	Spoiler (a device which changes the airflow round and aerofoil with the object of reducing the lift)	35	Forward or upward	Spoiler retracted

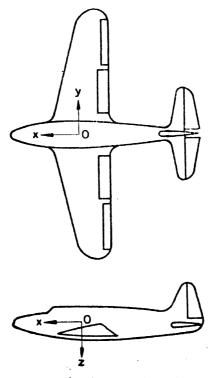
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SI No.	Type of Control	Shape and Approximate Size	Operation of Control	
		mm	Movement	Result of Movement
14.	Landing gear control	45 \$\phi\$	Forward or upward	Landing gear retracted

#### 4. Direction of Operation of Rotary Controls for Trimming Tabs

SI No.	Type of Control	Mounting Position of Control	Operation of Control	
			Direction of Rotation	Result of Movement
1.	Elevator trimming tab	Rotation axis of the handweel parallel to the y-axis* of the aircraft (axis along wing span). Vertical handwheel.	Forward†	Dive
			Backward†	Climb
2.	tab  to the z-axis* of the aircraft (vertical axis through centre of gravity). Horithe appropriate of the aeropland the same sense the desired air.	Each trim control should operate about the appropriate axis of the aeroplane in	Right yaw	
			the same sense as the desired aircraft response about that	Left yaw
3.	Aileron trimming tab	Rotation axis of the handwheel parallel to the x-axis* of the aircraft (axis along the fuselage)	Clockwise	Right roll
			Counterclockwise	Left roll

 $\bullet$  Axes x, y and z and the centre of gravity are as shown in the figure below:



† The direction of rotation refers to the upper portion of the handwheel.